THE TREATMENT OF THE WOUND AFTER CASTRATION.

By WILLIAM L. AXFORD, M.D.,

OF CHICAGO.

IN cutting operations on the scrotum, such as castration or ablation of the lower portion for varicocele, there is always an unpleasant possibility of a recurrent hæmorrhage, into the causation of which two important factors enter: in the first place the dartos, very vascular and readily contracting under the stimulus of the knife, again relaxes when the patient becomes warm in bed; secondly, the position and relations of the scrotum are such that there is no satisfactory way of compressing and supporting the wound by bandaging.

A rather unpleasant experience with a recurrent hæmorrhage after castration has led to the adoption of a method of wound treatment, for which is claimed security from after hæmorrhage and an increased probability of primary union.

Inasmuch as the case is one of considerable interest a brief report may be acceptable.

R. P., colored, æt. 26. Had both testicles bruised in July, 1882. Pain caused insensibility. Swelling subsided in a few days, and he again resumed his work as a coal-heaver. About six months after he noticed that the left testicle was enlarged and hardened. Tried all sorts of medical treatment. Came under my care at the South Side Dispensary in January, 1884. No history of syphilis. Testicle enlarged and hard. Some fluid in the tunica vaginalis, cord much hypertrophied but not roughened or indurated. Epididymis free from disease. The other testicle was apparently normal. I believed the testicle to be the seat of malignant disease and advised castration. Operation was performed in the usual manner, skin approximated with silk suture, a drainage tube placed in the wound, and an antiseptic dressing applied. I had ligated the cord with silk, en masse. A severe recurrent hæmorrhage occurred within an hour and required styptics to control. Even then it was stopped with difficulty. Convalescence, though much retarded by the accident, was uninterrupted. The testicle was the seat of a growth beginning at the centre and involving nearly the entire gland. Microscopical examination proved it a sarcoma.

In October, 1886, he again presented himself with exactly the same condition of affairs in the right testicle, and asked me to operate, saying that he had had no comfort for a year. The testicle had commenced to enlarge two months after the first operation. There was no return of disease in the left groin. Seeing no other way of relieving my patient, on October 18 I again operated, in a small room and under the worst hygienic surroundings imaginable. After shaving and scrubbing the field of operation the usual incision was made, the testicle rapidly enucleated, and the cord transfixed and tied in halves with fine carbolized catgut. After the testicle was cut away one or two bleeding points were secured with the catgut and all oozing controlled by hot water. Beginning at the lower end of the wound, with a small glover's needle armed with No. 9 iron-dyed silk, at intervals of three-fourths of an inch, sutures were passed at right angles to the line ot incision so as to traverse the tissues underlying the wound surface and extend completely around and beneath this surface, much the same as in laceration of the perineum. The sutures were visible only at the points of entrance and exit. The wound was closed in this manner up to where the cord lies by the side of the penis where it was found impracticable. A few interrupted sutures from this point upwards and a few superficial sutures between the long sutures completely closed the wound. At the side of the penis a small drainage tube was introduced; gauze, cotton, and a triangle bandage completed the operation. At the end of twenty-four hours the drainage tube was removed and a fresh dressing applied. At the end of six days it was found that primary union had occurred along the entire wound except at a point where two sutures that had been too tightly tied had cut into the wound, causing a small amount of suppuration. There was also some pus along the track of the deep sutures. The patient, contrary to my wishes, had spent a considerable portion of his time out of bed. All sutures were removed and a rest of a week enjoined, though practically the man was well. In again operating I should use aseptic sutures, and had perhaps better state that in an operation in the interval between these two I employed silver wire after this method, but do not like it, as it cuts more than silk and caused great pain on removal. The testicle presented much the same appearance as did the first, the microscope again proving it a sarcoma.

From a pathological standpoint the case is of much interest showing the relation between traumatism and neoplasm, and may be cited in support of the theory that single injuries are much more liable to produce sarcoma, while continued irritation usually results in carcinoma. Exactly why the disease developed so much later in one gland than in the other is problematical. Possibly the disease had started in the second testicle, though at the time of the first operation it could not be detected, the irritation of the styptic serving to incite it to new activity.

In conclusion: to obtain primary union and avoid recurrent hæmorrhage after the operation of castration.

I. Observe strict surgical cleanliness.

II. Ligate the cord with catgut.

III. Put in aseptic sutures as above described, because:

a. In the lower and dangerous portion of the wound all oozing will be controlled and drainage will be necessary.

b. The wound surfaces will be approximated and supported, primary union favored and recurrent hæmorrhage avoided.

IV. Drainage on the side of the penis alone is necessary.